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# Improving the NATO Force Planning Process

**Lessons from Past Efforts** 

James C. Wendt, Nanette Brown

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#### **PREFACE**

Since the early 1970s, various proposals have been introduced within the North Atlantic Treaty Organization to alleviate problems with the defense planning process. This report examines selected efforts within NATO to improve its conventional force capabilities. The purpose is to identify some broad guidelines for introducing and managing future initiatives. The report identifies the most important lessons or conclusions drawn from past initiatives and applies them to current defense improvement programs.

Very little has been written about the NATO Force Planning process or any of the initiatives, especially their institutional context. Thus, the authors have relied extensively on interviews with past and present officials of NATO, the United States, the United Kingdom, the Federal Republic of Germany, Norway, and Italy for the material presented here. To protect confidentiality they have not listed these sources or attributed any portions of this report to any individual.

The research discussed here is part of a larger study, entitled NATO Strategic Assessment, sponsored by the Under Secretary of Defense for Policy. The study, which is being conducted within Rand's Federally Funded Research and Development Center for the Office of the Secretary of Defense, assesses political, institutional, and military aspects of future U.S. initiatives in NATO to improve conventional defense capabilities. It should be of interest to policy analysts currently working on NATO and West European defense issues.





#### **SUMMARY**

This report examines several past efforts within NATO to improve conventional force capabilities. Its purpose is to identify a set of broad guidelines for how best to manage future such initiatives in NATO. — Various initiatives to enhance NATO's conventional capabilities introduced in the last 15 years reveal important lessons about how best to proceed with present and future efforts.

New political, military, and technological developments have sparked a new debate within the Alliance over how to improve NATO's conventional capabilities. The United States itself has introduced several recent initiatives including SHAPE's Follow-On-Forces Attack (FOFA), the U.S. Army's AirLand Battle, Counter-Air 90, the Emerging Technologies initiative, and now the set of Conventional Defense Improvement (CDI) proposals, tabled at the May 1985 NATO Defense Minister's meeting.

#### PROBLEMS IN THE NATO PLANNING PROCESS

However, many of these initiatives propose solutions to NATO problems without due consideration for how to carry them out effectively in practice. The NATO Force Planning system is often accused of being inadequate, inflexible, and inefficient because of problems inherent in the system itself, not to mention the built-in difficulties of planning on a multinational basis within a 16-nation alliance of sovereign states.

In its current form, the NATO planning system does serve three useful functions: It facilitates the consideration of Alliance-wide defense needs, it encourages military exchanges across the Alliance, and it monitors the meeting of force planning requirements. However, because NATO is an alliance of sovereign nations, its ability to define force requirements is limited by national preferences and even more by its lack of leverage over national programs. In most cases, national planning takes precedence over NATO planning; indeed the latter is mostly a reflection of the former. Member nations insist on preserving their sovereign right to plan for their national security and have different interpretations of NATO strategy. In addition, organizational problems undermine the smooth moving of conventional defense initiatives through the NATO system. The result is often a broad statement of need without a proper sense of priorities, an inability to agree on long-term requirements, a lack of mechanisms for carrying out the

force goals, a lack of coordination of different NATO planning efforts, and inadequate follow-through.

#### REVIEW OF PAST EFFORTS

These problems are not new. Indeed, since the early 1970s many initiatives have been introduced outside the regular NATO planning machinery in an effort to cope with its inadequacies. These have been of two broad types:

- Major initiatives, which attempt to cope with a broad range of conventional force deficiencies and are conducted outside the normal force planning machinery.
- Specialized programs, which focus on a narrow Alliance need.

This report examines five major initiatives: Alliance Defense for the 1970s (AD-70), SHAPE's Flexibility and Three Rs Studies, the Long-Term Defense Program (LTDP), the Emerging Technologies (ET) initiative and the current CDI/Conceptual Military Framework (CMF) initiatives. Also considered are five specialized programs: the Airborne Early Warning and Control System (AWACS) program, Common NATO Infrastructure and the Collocated Operating Bases (COB) program, the Roland/Patriot agreement, and the U.S./FRG Host Nation Support (HNS) agreement.

#### **Guidelines for Major Initiatives**

Our analysis suggests several major guidelines that should be useful to the current CDI initiative and others that might be undertaken in the future. In general, such major initiatives should:

- Not be undertaken lightly. Since major initiatives tend to disrupt the normal NATO planning process and could even undermine Alliance cohesion, careful judgments should be made regarding the content and timing of such initiatives. If they are launched too frequently, they will tend to overload the NATO circuits.
- Present a clear military rationale. All of the comprehensive programs need to base their assessments on clearly articulated military needs.
- Choose a time frame carefully. It takes NATO two to three years to design and launch a major initiative. Moreover, much time is usually required to arrange financing. On the other

hand, longer-term planning is seriously constrained by the dissipation of interest within NATO and the short tenure of U.S. administrations. The change in administration during the LTDP contributed to quickly dumping the LTDP back into the normal planning process.

- Provide clear political and economic benefits. Many problems
  with the comprehensive initiatives are linked to the lack of
  political and economic benefits to the Europeans. The ET initiative would have been more readily accepted had it promised
  such benefits.
- Introduce a better sense of priorities into the recommendations to influence national planning priorities. A serious deficiency in AD-70 and the Flexibility Studies and Three Rs was that these programs proposed so many recommendations that no change in planning was required by the countries. NATO-wide needs were not sufficiently identified.
- Include adequate machinery for follow-through. Unless this is done, the initiative may be accepted in principle, endorsed by ministers, and then largely ignored in practice. Means must be found to encourage ministers and their staff to execute any initiative.

Since the United States itself introduced most new major NATO initiatives and, as NATO's most powerful member, necessarily plays a key role in them, these guidelines are particularly important for the United States. Thus, the United States should:

- Appoint an individual at the Assistant Secretary of Defense (ASD) level or higher within the Pentagon to be responsible for the program. Much of the LTDP's success can be linked to the presence of a Special Advisor to the Secretary of Defense for NATO who was able to focus the Pentagon's attention on the program and provide a central point where Europeans could address their concerns.
- Secure tacit support for the program before introducing it in NATO. It is essential to secure at least a prior consensus within the U.S. government; acceptance by the major military commanders, especially SACEUR; approval by the heads of government if necessary; and involvement of the European finance ministries.
- Develop adequate U.S. follow-through mechanisms to help ensure allied compliance. Since the United States itself launches most NATO initiatives, we have to monitor them carefully to prevent

the recommendations from slipping back into the regular planning process.

#### **Guidelines for Specialized Programs**

An alternative way to achieve more narrowly focused conventional improvements is through specialized programs. These may be undertaken through common funding (AWACS, Infrastructure, or COB program) or by specific bilateral/multilateral arrangements (Roland/Patriot agreement or HNS program). These entail less dramatic changes in the planning system by focusing on individual programs. These too should:

- Have clear military benefits. Specialized programs should address a recognized military deficiency even more than major initiatives. This applies to both common-funded and bilateral/multilateral programs, as the success of the AWACS program and the Roland/Patriot agreement illustrates.
- Have clearly identifiable benefits for all parties involved. This is again more important in specialized programs, especially when they require countries to increase normal defense expenditures.
- Have broad Alliance-wide interest. Ideally, a program in this
  category should have the participation of most Alliance
  members. Again, the appeal of the AWACS program lay in the
  fact that one nation could not procure the system alone. This
  is not necessarily a prerequisite of bilateral/multilateral programs as long as the military benefit has been clearly defined.
- Not be undertaken by common funding if immediate response is needed. The more countries involved in a program, the longer it will take to procure the weapon system. For example, despite consensus, AWACS took over ten years before the acquisition process was complete.

Implementing a specialized program also requires careful attention to follow-through. It is important to:

- Involve the military commands. The major military commands in NATO and in nations must present a clear case of military need. For example, the U.S. Air Force played a vital role in acquiring the AWACS system.
- Create special machinery to carry out the program. Because specialized programs can require consensus beyond the normal NATO channels, it is often necessary to set up additional machinery to execute programs. The COB program operated

within the NATO Infrastructure program, which slowed its implementation, whereas AWACS created new machinery, which worked quite well.

#### Making the CDI Work

Aside from the above general guidelines, several recommendations flowing from this study are specifically applicable to the new CDI.

Military Deficiencies. Procedures and machinery are needed to assure adequate focus on the nine key deficiency areas identified in the CDI.

• The CDI initiative currently lacks a strong follow-through mechanism and thus could be lost in the system soon after introduction. Hence, a new committee or other means should be established to monitor the progress in the nine areas. This committee should apply public pressure to ensure that the countries follow force goals in these areas. If NATO formed such a committee to oversee CDI progress, for which the U.S. representative should have the rank of ASD or higher, its monitoring function could receive high visibility.

Long-Term Planning. Many attempts have been made to improve NATO's long-term planning capability. In the past, these have usually been directed toward extending the length of time of the planning process beyond the present six-year period. The CDI emphasizes the long-term roles and missions of NATO forces and the forces necessary to support these roles and missions. In addition, more attention should be given to improving the coordination of the planning systems of the individual NATO nations. NATO should:

Gain a better understanding of the planning systems of individual NATO nations and integrate this knowledge into the NATO system to increase its flexibility. It is necessary to know when nations are beginning their planning cycles for new weapon systems so that NATO can provide advice before decisions are made instead of after.

**Armaments Cooperation.** To cope with problems of technology sharing that impede arms cooperation:

The United States needs to concentrate on the problem of technology sharing within DoD and Congress and to develop a more coherent industrial policy before emphasizing future R&D level cooperation. The U.S. government is currently pursuing a

conflicting policy that threatens the credibility of arms cooperation in NATO—namely, offering R&D technology sharing while at the same time restricting the flow of advanced technologies. This problem is compounded by industrial restrictions to forestall national and foreign competition.

• Short of a grand technology-sharing strategy, the United States should continue to pursue specialized programs. In particular, bilateral and multilateral programs would be a useful way to continue increased cooperation while a longer term R&D strategy was being developed.

A common funding approach might also be useful for procuring certain weapon systems, as in the case of AWACS. However, this approach should reflect certain lessons learned:

- The program should have clear military objectives.
- Ideally, agreements will be reached more quickly if off-the-shelf equipment is available.
- The process is likely to be slow.

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• The program could divert funds from other programs; therefore, common funded procurement programs should have a high priority.

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#### **GLOSSARY**

AEW Airborne Early Warning
ASD Assistant Secretary of Defense
ASG Assistant Secretary General

AWACS Airborne Early Warning and Control System

CDI Conventional Defense Improvement
CMF Conceptual Military Framework

CNAD Conference of National Armaments Directors

COB Collocated Operating Base
DPC Defense Planning Committee
DPQ Defense Planning Questionnaire
DRC Defense Review Committee

DRE Defense Research and Engineering EOF Essential Operating Facilities ET Emerging Technologies FEBA Forward Edge of Battle Area FOFA Follow-On-Forces Attack FRG Federal Republic of Germany

HNS Host Nation Support
IFF Identify Friend or Foe
INF Intermediate Nuclear Force

IS International Staff

ISA International Security Affairs ISP International Security Policy

JCS Joint Chiefs of Staff

LTDP Long-Term Defense Program
MBFR Mutual Balanced Force Reduction

MC Military Committee

MEF Minimum Essential Facilities
MLRS Multiple Launch Rocket System
MNC Major NATO Commander

MOB Main Operating Base

MSC Major Subordinate Commander

NADGE NATO Air Defense Ground Environment
NADREP National Armaments Directors Representatives

NPG Nuclear Planning Group

OSD Office of the Secretary of Defense

POL Petroleum, Oil, Lubricants

SACEUR Supreme Allied Commander Europe SACLANT Supreme Allied Commander Atlantic xvi

SAM Surface-to-Air Missile

Supreme Headquarters Allied Powers Europe United States Air Force SHAPE

USAF

USAFE United States Air Forces Europe

#### I. INTRODUCTION

NATO has often struggled to define its conventional force requirements. In 1952, when the Korean War increased the possibility of Soviet aggression in Europe, the allies responded to this threat by pledging to contribute 97 divisions—both active and reserve—to the defense of Western Europe. However, it soon became apparent that no NATO country could devote the resources necessary to reach this goal. By 1954, at the December NATO Council meeting, the NATO members had decided to substitute less-expensive nuclear weapons for the costly conventional forces called for in the Lisbon Force Goals in accordance with the New Look policy of the United States. Under this policy, conventional forces were not required to be robust because they were to serve only as a "trip wire" for the nuclear forces.

With the advent of Flexible Response in 1968, the requirements for conventional forces changed again. Conventional forces were required to be robust enough to prevent the need for early use of nuclear weapons and perhaps to defend Western Europe conventionally. Although the robustness of conventional forces called for under this doctrine remains a point of contention within the Alliance, the adoption of this new doctrine clearly required conventional defense improvements and sparked a debate over how to meet this requirement. During the 1970s this debate continued but the war in Southeast Asia and nuclear modernization issues often overshadowed it

Recently, political and technological developments in the Alliance have renewed the debate. The European governments have advocated conventional defense programs aimed at raising the nuclear threshold to calm public fears aroused during the Intermediate Nuclear Force (INF) debate. In addition, the development of new-generation conventional weapons, with increased accuracy and lethality, has increased interest in the potential of these weapons for improving force capabilities. Thus, attention again is on to how to improve conventional forces within the Alliance.

Failure to provide adequate conventional forces does not result from a lack of resources. The NATO nations have far more resources than do the nations in the Warsaw Pact. Although these NATO nations, on the average, devote a smaller portion of their resources to defense than do the Pact countries, they devote a larger aggregate amount of resources to defense. Nevertheless, the Pact nations produce more

guns, tanks, airplanes, etc., with these fewer resources than does NATO. Furthermore, NATO forces suffer from persisting deficiencies, such as inadequate stores of muntions, insufficient airbase defenses, insufficient reserves, and other problems.

To improve NATO conventional forces, NATO must discover ways to improve the use of the resources of the individual NATO nations. This can be done through better planning and coordination of the efforts of the individual nations. Many have concluded that the system responsible for overall force planning and coordination within the Alliance—the NATO Force Planning system—is at fault. Thus, a variety of efforts have sought to improve the output of the system by changing the planning and implementation process from the outside, by working to improve it from the inside, or by circumventing it altogether.

In this report, we first examine the regular NATO Force Planning process to see why it fails to produce sufficiently robust and complementary NATO conventional forces. Then we examine the political and institutional framework of several initiatives—major initiatives and specialized initiatives—that have been introduced into NATO over the past 15 years to improve the making and implementing of decisions regarding NATO's force posture. From these past initiatives, we try to draw some lessons and to construct some guidelines about how to proceed in the future in the effort to improve the planning system. Finally, we apply some of these guidelines to current conventional defense improvement efforts within NATO.

Our focus throughout this report is on the political and institutional framework for making and implementing decisions regarding NATO's force posture. We exclude from our consideration the industrial aspects of procurement including production and coproduction.

<sup>&</sup>lt;sup>1</sup>Our research benefits greatly from a series of extensive interviews that were held with past and present U.S. and West European government officials and defense analysts and NATO officials involved in NATO defense efforts.

#### II. THE NATO FORCE PLANNING SYSTEM

Planning and coordinating the committed conventional forces of all NATO countries occur through the NATO Force Planning system, which provides a framework for ensuring that numerous national, political, military, and economic considerations are properly integrated into the force plans that the member nations approve. For many reasons, this planning process does not always meet the needs of the Alliance. Some of the reasons for shortcomings in the system are inherent in the nature of the Alliance or of the system itself and cannot be easily corrected. However, some of them can be addressed by modifications of the system.

#### DEVELOPMENT OF THE PRESENT SYSTEM

Before 1961, the NATO commanders, in particular the Supreme Allied Commander Europe (SACEUR), largely conducted NATO force planning. After consultation with military representatives from the NATO nations, SACEUR determined NATO's military requirements. Little consideration was given to resources, costs, or other constraints. As a result, SACEUR's requirement plans were often quite unrealistic, and member nations tended to ignore them.

Shortly after Secretary McNamara came into office in 1961, in conjunction with Secretary General Stikker, he initiated a study of the old planning system. Several of the resulting recommendations altered the NATO organization. Three new bodies were formed: the Defense Planning Committee (DPC) of Defense Ministers, the Directorate of Defense Planning in the NATO International Staff, and the Defense Planning Working Group. The intent in creating the DPC—the predecessor of the present DPC—was to substitute civilian for military authority in the NATO organization to make the flow of authority in the system more parallel to that in national defense planning. The formation of the Defense Planning Working Group was significant because it initiated changes in the force planning process—most important the five-year rolling force plan introduced in December 1965. It asked the NATO nations to anticipate their needs five years in advance and to assess their resources realistically. The formal process through which this planning occurred was the Annual Defense Planning Review. This system—now involving a six-year plan—is basically what NATO uses today.

#### **CURRENT FORCE PLANNING SYSTEM**

Currently, the NATO force planning process occurs in three stages (see Fig. 1). In the first stage, at the ministerial level, the DPC issues Ministerial Guidance as the outline for force planning. The DPC's role in this first stage is to examine the military and economic assessments presented to it by the Military Committee (MC) and Defense Review Committee (DRC) and to issue guidance for the Major NATO Commanders (MNCs) to develop specific force proposals.

In the second stage, Force Goals are generated to respond to Ministerial Guidance. In principle, NATO Force Goals are based on the MNC's assessment of individual countries' force requirements in the next six years; they are then passed up through the MC and DRC for further review before being considered by the DPC. However, for the most part, NATO force goals are in reality a reflection of the nations own force plans. To these are added an element of "challenge"—additional force goals that the NATO commands believe are within the capacity of each nation. After the NATO Force Goals are formulated, a Defense Planning Questionnaire (DPQ) is sent to each country to determine how countries' national plans compare with NATO Force Goals.

The final stage in the planning cycle is to turn these force goals into official NATO Force Plans. This stage in planning attempts to reconcile national force plans with NATO Force Goals. It is primarily the responsibility of the individual countries to identify the best match between the two, by both the International Military Staff and the DPC often try to persuade nations to modify their national plans to better fulfill the NATO Force Goals. In the last step of the process, the NATO Defense Ministers approve the Five-Year Force Plan. The ministers formally commit forces to the Alliance for the first year and agree to procure or modify their forces to achieve the five-year plan.

These three stages occur over two time cycles. The Ministerial Guidance and the NATO Force Goals are issued every other year and cover a six-year time period. The progress review of each nations' fulfillment of the NATO Force Goals is then conducted every year, examining a five-year time frame. NATO Force Plans are issued every year for five years in the future. Step 3 of the three-phase planning process is, thus, repeated annually.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup>See The North Atlantic Treaty Organization: Facts and Figures, NATO Information Service, Brussels, 1984, pp. 146-151, for a description of the current force planning process.

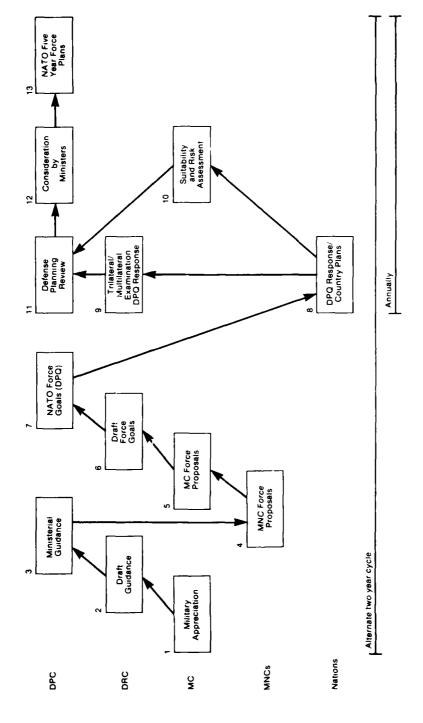


Fig. 1-NATO defense planning cycle

#### ASSESSMENT OF THE NATO FORCE PLANNING SYSTEM

NATO is an alliance of sovereign nations and, as is evident in this brief description of the formal planning system, does not have the design or authority to enforce compliance. This limitation often leaves the planning system open to criticism for being inadequate, inflexible, and inefficient.

#### Virtues

In spite of its limitations, the present system has served three useful functions: (1) It is the only planning system within the Alliance that considers Alliance-wide force needs, (2) it encourages exchanges of information concerning defense across the Alliance, and (3) it monitors the execution of defense planning requirements.

Perhaps the most important function the current planning system serves is as an Alliance forum for systematic force planning. For the alliance to function, it is necessary to conduct broad assessments of the threat, to identify the proper framework for the use of allied forces, and to examine alternative force deployment and acquisition strategies. The planning system brings these activities together and provides a forum for coordinating analyses of NATO force requirements.

This same forum also brings together detense representatives—both military and civilian—from various nations who exchange information. Given the expected difficulties likely to confront NATO in trying to fight a coalition-style war, this exchange of information and cooperation among defense analysts and planners is essential to increasing the coherence of military planning that occurs in the individual countries.

Finally, although lacking coercive means, the current planning system does produce a written challenge to the NATO countries in the form of the NATO Force Goals. This process challenges each country to increase its contribution and in some way holds nations accountable to the other Alliance members for shortfalls. Although some NATO countries tend to minimize their own defense efforts and simply enjoy the defense provided by others, the challenges posed by the force goals highlight these minimum efforts and sometimes lead to increased defense contributions by those members of the Alliance.

European defense ministries also use force goals to help generate funding for needed weapons programs within their own governments. When going through the normal defense budget review process, Defense Ministers find it helpful to have NATO analyze and endorse their defense requirements.

#### **Impediments**

Because NATO is a defensive alliance of sovereign nations, it must accept that all member nations will preserve their sovereign control over planning for their own national security. The issue of national sovereignty creates difficulties in identifying conventional force needs, in establishing Alliance priorities among the requirements, and in implementing any changes. These problems have roots outside NATO, which makes correcting them difficult; they arise from differences in national interests and threat assessments and from various interpretations of NATO strategy and doctrine.

Each nation approaches the problem of Alliance defense from a national perspective, filtering NATO's needs through their own geopolitical, historical, and strategic positions, as well as their own assessments of how force plans will affect their economies. For example, the countries on the Southern Flank have a greater interest in the Mediterranean area, whereas countries in Central Europe are more concerned with the inner German border. In addition, the United States, France, and Great Britain plan their force structures for contingencies other than NATO defense because of their strategic position and past colonial ties.

Likewise, basic differences over interpretations of NATO strategy limit the potential for Alliance consensus on planning issues. Debate continues among Alliance members over the proper role of conventional forces in a conflict in Europe because no clear consensus exists about the meaning of the flexible response strategy. Historically, although the United States has emphasized the need to acquire a strong conventional capability in Europe, Europeans have relied on the U.S. nuclear guarantee as the primary means of deterring a conflict in Europe. Although recent events have somewhat closed this gap and both the United States and Europe are now interested in strengthening conventional forces to avoid the early use of nuclear weapons, a debate still continues over what strengthening conventional defense means for force acquisition and long-term planning.

In addition, there are several general organizational problems with NATO as a whole that affect planning and implementation. Certain problems tend to be associated with any large organization—lack of innovation, efficiency, and speed. Many critics accuse the regular NATO bureaucracy of trying to block change and of trying to turn any problem into a question of coordinating procedures. Whether or not this is a fair criticism, NATO's track record does suggest that new ideas either are subsumed into the regular Force Planning system and resemble on-going procedures, or they are discarded or ignored because

they cannot be integrated satisfactorily. Also, the pace of the system at times seems not to be affected by the urgency of the problem, but by the timing of the various sessions. Although work and analysis proceeds throughout the year, important changes cannot be made without the approval of the Defense Ministers at the spring and fall sessions.

These problems are inherent in the system, so little can be done to change them except by radically altering the basic premise of the Alliance or by redesigning the system. At the very least, these types of problems and impediments must be acknowledged because they help define the areas where improvements can be made.

#### Limitations

The impediments just discussed arise from the very nature of the Allian., or from the nature of its organizational structure, and are quite resistant to change. Fundamental attitudes of the Alliance members would have to change. But considerable improvements are possible within the present system. The output of the NATO planning system could be improved if we directed our attention and efforts toward these areas: implementing the force goals, setting priorities, long-range planning, and weapons acquisition cooperation.

Perhaps the greatest single weakness of the regular NATO Force Planning system is its inability to get sovereign allies to carry out its force goals procedures. Even when nations accept the force goals, these are often not funded in national plans and programs. When nations fail to meet these force goals, they are reminded of this failure at the following DPC meeting. But they usually have a list of reasons to explain their shortcomings and no coercion is possible.

Another major weakness of the NATO Force Planning system is its inability to set priorities adequately and to follow them. The force goals set by the DPC are placed into three categories according to their priority, but these categories are too broad. Moreover, when countries respond to the DPQs in their own national plans, these priorities are largely ignored. On the average, about 70 percent of the NATO force goals are adopted by the individual countries in their own plans and about 70 percent of these, or about 50 percent of the original force goals, are actually implemented.<sup>2</sup> In practice, the 50 percent of the original force goals that nations implement are selected by the individual nations on the basis of their own criteria and not on the basis of their relevance to NATO's coalitional needs. If nations could be per-

<sup>&</sup>lt;sup>2</sup>Based on conversations with U.S. government officials.

suaded to implement the 50 percent of the force goals that best meet Alliance requirements as a whole instead of national needs, Alliance defense capabilities would be considerably improved.

There are many reasons why the NATO system fails to set and follow priorities adequately. One is the desire of the individual nations to guard their own national prerogatives and to use their own resources according to their own strategic assessments. The NATO nations will always have differences over strategic assessments and will always preserve their own discretion; however, even within the area of agreed strategy, nations have different perceptions over how to conduct a defense. The military forces of the various countries all have their own interpretation of how a war would proceed and they are prepared to fight it their way and acquire forces accordingly. When offered a list of force goals, they choose those goals most suited to their own perceived needs

In addition, there is a general reluctance to set priorities among military establishments. Military establishments in all NATO countries have learned through experience that a list of priorities can be used against them. Setting priorities often means the elimination of low-priority items but it does not necessarily mean the approval of high-priority items. National legislatures interpret the lack of support of an item by the military as synonymous with the lack of need of that item. However, high-priority items are also subject to legislative scrutiny and may not be approved.

Another limitation of the NATO Force Planning system is its lack of long-range planning, which is essentially a process of matching future requirements with future capabilities. Even within individual nations, this process is difficult because neither of these elements can be known with much certainty. Within the Alliance, the difficulties are more acute because there is even less agreement over long-term requirements. Occasionally, allies can agree over a particular long-range need—such as electronic warfare, Identify Friend or Foe (IFF), or AWACS—but agreement over broader areas is more difficult.

A more serious problem limiting long-range planning in NATO is the lack of control over the development of future capabilities. NATO Force Goals are set every two years for six years in advance. However, the length of time from the R&D stage to the initial operating capability of a weapon system can be ten to 15 years. By the time NATO nations have NATO Force Goals in hand, the development of most weapons systems has already begun. The system does not provide guidance during the critical period when such advice could be useful.

A fourth major deficiency in the NATO Force Planning system is its lack of guidance to individual nations over how to implement the force goals. Although nations are asked to fulfill force goals, NATO has no adequate mechanism to help countries acquire the necessary forces or to coordinate efforts within individual countries. Within the Alliance there is considerable duplication in the research, development, and production of conventional forces. All nations have recognized that some kind of cooperative process could be beneficial to individual nations as well as to the Alliance as a whole.

This process of cooperation and planning is limited. The procurement of weapons systems occurs through the actions of industrial firms, which employ a substantial labor force and support and develop high-technology research, development, and production techniques. Therefore, governments tend to support their own national industries in unprofitable and inefficient projects if these projects help their economies. Nations will continue to choose a more expensive and less efficient policy unless we can change the incentive structure and provide some of these benefits through cooperation.

Despite these problems, some improvements are possible. The following section presents some examples of past programs that addressed some of the problems discussed here by by-passing some elements of the normal planning system in an effort to improve conventional capabilities.

#### III. MAJOR INITIATIVES

Because of the limitations and weaknesses of the normal NATO Force Planning process just described, various initiatives have been proposed, usually by the United States, to evaluate the needs of the Alliance as a whole and to recommend broad improvements in NATO's conventional force capability. These initiatives have taken several forms, have originated in different places, have been carried out in many ways, and have had varied objectives. This section analyzes some of these past initiatives to see what lessons they may provide for us today.

#### AD-701

#### Background

By the end of the 1960s, a new development in the Alliance seemed to require a change in the NATO force structure. Flexible Response—the new NATO doctrine—called for a broad range of conventional forces to meet the Soviet challenge at any level. The Soviet invasion of Czechoslovakia in 1968 and the subsequent deployment of five additional Soviet divisions in that country also accentuated NATO's conventional deficiencies in the Central Region.

Even as it became increasingly obvious that NATO had to address the deteriorating conventional balance, pressures mounted on certain NATO countries to reduce their troop commitments. In the United States, many began to feel that Europeans were not contributing sufficiently to their own defense. In addition, the war in Vietnam was demanding more and more resources, and many Americans resented the unsympathetic positions of some NATO allies. In response to this public sentiment, Senator Mike Mansfield introduced a bill in Congress to reduce the U.S. troop commitment in Europe.<sup>2</sup>

For domestic reasons, some European countries were also threatening to reduce their force commitments to NATO: Belgium wanted to reduce the number of its forward deployed troops; Canada had

<sup>&</sup>lt;sup>1</sup>The development of AD-70 is chronicled in a series of NATO Letters and NATO Reviews. In particular, see NATO Letter, October-November 1970, December 1970, January-February 1971, and March-April 1971, and NATO Review, May-June 1971, September-October 1971, November 1971, and January-February 1972.

<sup>&</sup>lt;sup>2</sup>For the text of the Mansfield Resolution, see NATO Letter, April 1970, p. 23.

proposed to cut its European deployments by two-thirds; and the FRG was reducing the length of conscription. The combination of a growing Soviet conventional threat, a new strategy that emphasized stronger NATO conventional forces, and a potential reduction in troop strength within the Alliance forced NATO officials to come to grips with the problem of force improvements.

It was in this context that AD-70 was introduced. The program was designed to address NATO's military problems by improving some of its most serious conventional force deficiences. The program was also intended to address Alliance political problems by increasing European contributions to NATO conventional force improvements. The groundwork for the AD-70 initiative was established by two key players in NATO at the time: General Goodpaster (SACEUR) and Secretary General Brosio. Much of the analysis and the details of the programs included in this initiative originated in the United States, with the active participation of the office of International Security Affairs (ISA) in the Pentagon and certain elements of the State Department. The actual implementation occurred primarily within the NATO bureaucracy.

The purpose of AD-70 was to identify the main deficiencies in NATO's conventional defense capabilities and then to devise collective improvement plans to address these problems. In all, eight areas were identified and the proposed improvements were sent through NATO channels: to the DPC, the DRC, and finally the Executive Working Group. Six of the eight areas were finally given high priority in 1973: aircraft shelters, anti-armor, war reserve stocks, electronic warfare, air defense, and the modernization of air-delivered munitions.

AD-70 succeeded in accomplishing more of its political goals than its military goals. For the most part, the tide of Mansfieldism and troop withdrawals had ebbed by the early part of the 1970s. This change can be attributed, in some respects, to the active role played by the European governments in AD-70 and to the promise of increased contributions to NATO defense by these governments.<sup>3</sup> An important political factor was the formation of the Eurogroup, an organization through which the European members of the Alliance discussed methods of enhancing European participation. In particular, through the Eurogroup, the European members of the Alliance increased their share of NATO infrastructure funding for aircraft shelters, a key problem identified by AD-70.

<sup>&</sup>lt;sup>3</sup>An additional reason was the opening of Mutual Balanced Force Reduction (MBFR) negotiations at this time.

However, aside from these improvements in aircraft shelters, little was accomplished in the military arena. Few improvements were made in the six high-priority areas and once the political pressure was removed, no special efforts were made for further improvements.

#### Lessons

Despite some modest successes, AD-70 took only the first steps toward improving NATO's conventional defense capabilities. The program did identify critical areas for defense improvements. But it attempted to implement suggested improvements through the normal NATO Force Planning system. This move ensured its acceptance by national and NATO officials and directly involved the NATO bureaucracy in its execution, but it also ensured that the initiative would not escape from the limitations of the normal planning system that undermined its effectiveness. This meant that a few short-term changes were implemented, but once the political pressure was reduced, efforts at improvement were largely forgotten.

The intent of the AD-70 initiative was to improve the output of NATO force planning. However, to gain acceptance throughout the Alliance, it was implemented through reliance on the regular NATO Force Planning process. Thus, the intiative was hampered by several of the impediments of the process, such as resistance to change and the slow pace of the system. In addition, many of the recommendations were either near-term force fixes or longer-term improvements without long-term guidance. This approach, therefore, did not result in extending the force planning horizon. The importance of establishing priorities across the eight defense areas was lost because there were too many recommended improvements. The priorities were so broadly defined that their effect was diffused. Finally, insufficient measures for follow-through were established to ensure that the countries would abide by NATO's recommendations. AD-70 relied almost entirely on the regular NATO system to implement the program and did not introduce any extra mechanism to oversee the process.

#### FLEXIBILITY STUDIES AND THE THREE Rs

#### Background

By 1974, NATO's conventional force posture had not improved much. Some of the most serious deficiencies were in areas such as air defense, early warning, and readiness, which directly affected NATO's ability to respond quickly and effectively to a Warsaw Pact surprise attack. Two efforts were undertaken at SHAPE to address these deficiencies and to respond to the growing threat of a Soviet surprise attack.

In 1974, the Flexibility Studies were produced—a series of coordinated analyses by SACEUR of the Central, Northern, and Southern Regions, and by Supreme Allied Commander Atlantic (SACLANT) to identify possible improvement areas for enhancing NATO's conventional force flexibility. In all, the studies recommended 865 improvements. However, these recommendations were never approved by the Defense Ministers or converted into an action program. Hence, this effort faded quickly without ever being implemented.

The second effort, directed by General Haig (SACEUR) in 1976, had more success. This program, called the Readiness, Rationalization, and Reinforcement program (Three Rs), was not an original program; it drew exclusively on the Flexibility Studies to identify force improvements. General Haig designed the program to take the most useful recommendations from the Flexibility Studies and repackage them according to SACEUR priorities.

To implement this initiative, Haig went outside the normal channels in NATO. He identified nations that were not meeting their force goals. Then he presented their deficiencies in relationship to the Three Rs framework to give a scheme of priorities to improvements. Meetings were held with European military commanders to ask for suggestions and to be sure follow-up work was being done. He conducted interviews, talked with NATO officials, wrote journal articles, and testified before Congress to increase the visibility of the program. In short, he used his authority as SACEUR to pressure nations to increase their efforts in accordance with the priorities of the Three Rs.

This program ran from 1974 to 1982 and in that time approximately 80 percent of the original recommendations were successfully carried out. Those tended to be low-cost or no-cost items.

#### Lessons

The Flexibility Studies/Three Rs program was different from the other major off-line programs because it was designed by NATO military officials and did not involve political authorities. Its purpose was to identify specific military problems that did not necessarily require the involvement of the political authorities. However, a major reason for the lack of action on the Flexibility Studies was the lack of support by all national militaries. Although this type of initiative may not require support by national political authorities, it must be supported by national militaries at a high level. And without political support, it

is difficult to persuade national military leaders of the need for changes. In the case of the Three Rs, General Haig's authority as Supreme Allied Commander allowed him to set Alliance-wide priorities and work closely with the other military leaders. Furthermore, his visibility was such that he also gained political cooperation from national leaders. Nevertheless, the accomplishments of the Three Rs were modest in terms of NATO's needs.

There are several problems with a military-sponsored initiative. First, it must rely entirely on persuasion to be effective. If national military leaders can be convinced of the need for change, then they will act. However, they often have their own agenda and persuasion often is not enough. They must be coerced by national political leaders.

Another problem with the military-sponsored initiative is its lack of funding. Although there are examples of important low-cost or no-cost items that can improve Alliance capabilities (e.g., procuring a common gas nozzle so that NATO aircraft can refuel at any base), many improvements are expensive and additional funding is required. Without the support of political leaders (and financial ministries in European countries), the possibilities for improvement are limited. In fact, many of the Three Rs' larger recommendations were picked up by the Long-Term Defense Program (LTDP) and included in its format.

Finally, such an ad hoc approach lacks an institutional follow-through. Whatever success can be attributed to the Three Rs was due to General Haig personally while he was SACEUR. He pressed the program forward, but when he left in 1982 the program ended.

#### THE LONG-TERM DEFENSE PROGRAM<sup>4</sup>

#### Background

In 1977, following the withdrawal from Vietnam, the United States was once again able to turn its attention to Europe. The change in U.S. administrations and renewed hope in Europe for a more European focus by the United States set the stage for a large cooperative NATO effort.

The LTDP was designed to identify, in a priority form, key conventional force improvement areas, and to provide the proper mechanisms for ensuring enough independence from the normal force planning

<sup>&</sup>lt;sup>4</sup>For a description of the LTDP, see Report on Allied Contributions to the Common Defense: A Report to United States Congress by the Secretary of Defense, March 1982, p. 83; and The Implementation of the NATO Long-Term Defense Program (LTDP), First Report by Committee on Government Operations, U.S. Government Printing Office, Washington, D.C., 1981.

process to ensure that these improvements would be carried out. Furthermore, for the first time, a major initiative was tied to a funding source. The LTDP was to be funded within the 3 percent real annual growth in NATO defense budgets approved by the Defense Ministers in 1977.

The idea for a new major initiative came from inside the Pentagon. The first step taken toward devising the initiative was to coordinate support for it within the U.S. government and Europe. Robert Komer was appointed Advisor to the Secretary of Defense for NATO to design and carry out the program.<sup>5</sup> Before it was introduced within the Alliance, he was able to secure the support of the Joint Chiefs of Staff, the military services, State, and the offices of ISA and Defense Research and Engineering (DRE) within the Office of the Secretary of Defense (OSD). In addition, discussions were held with various European and NATO officials including Secretary General Luns and General Haig to get at least tacit agreement from some of the major actors before officially introducing it to NATO. Moreover, the concept of designing an LTDP was broached at the highest level by President Carter at the NATO Summit Meeting in May 1977. President Carter proposed that if the allies could produce a suitable LTDP within a year, he would host a second heads of government summit in Washington a year later to consider it. This high-level process largely circumvented bureaucratic obstacles, though it did stir up much staff-level resentment.

The second step involved the introduction of the LTDP into the official NATO system. The NATO Defense Ministers approved the concept and established task groups to define the scope of the effort. The task groups used the program as the basis for their work. They identified nine functional areas for conventional force improvement: readiness, reserve mobilization, reinforcement, maritime posture, air defense, C3, electronic warfare, standardization/interoperability, and logistics. Later, theater nuclear modernization was added. The task forces then identified specific programs that NATO nations should carry out to address these problems. The focus was deliberately long term, to lengthen the planning horizon and to overcome objections on grounds of short-term resource constraints.

The third step in the program was to create machinery for systematic follow-through. In this phase, the task forces monitored the progress of the countries toward meeting the LTDP program. Highlevel program monitors were assigned to act on each of the areas and to submit progress reports to the DPC every December. This

<sup>&</sup>lt;sup>5</sup>Robert Komer entered the Carter Administration with the idea of introducing the LTDP in NATO. He had conducted much of the initial research before entering the government.

monitoring was outside the regular force planning process, and different records were kept on nations' progress toward meeting NATO Force Goals and LTDP requirements. Separate reporting procedures continued until the LTDP was incorporated back into the regular force planning process in 1981.

#### Lessons

The LTDP sought to address the important limitations of the NATO Force Planning system. Priorities were established and a follow-through mechanism was created with a focus on long-range efforts. Finally, functional areas were established to improve coherence and cooperation.

The implementation procedure was effective. Because it was a U.S. initiative, someone had to be responsible for carrying it through the NATO system and working with European governments. Robert Komer's role was vital to the functioning of the LTDP because NATO staff and European officials saw him as the key figure. His active campaigning, plus President Carter's launching of the LTDP at two NATO summits, permitted the program's quick introduction and circumvented the slow NATO approval process. The LTDP received the attention and approval of U.S. and European heads of state, which provided NATO with the authority to carry through the program.

However, one problem with the LTDP was that it tried to change the planning process too much, too quickly. It attempted to institute a comprehensive change from outside the system and new groups and reporting procedures were superimposed on the existing structure. It is doubtful that the men bers of NATO disagreed with many of the recommendations put forward in the LTDP for force improvements, but much of this consensus dissipated because Komer exerted pressure on the European governments and additional reporting procedures were created.

An important lesson to be learned from this experience is to match pressure with what is politically tolerable. The individual steps laid out above were all necessary—a responsible senior official to "oversee" the program, an initial focus to gain consensus among political leaders, and the construction of follow-through mechanisms. However, the LTDP was opposed by many Europeans because it insisted on major changes. The LTDP could have benefited from more modest goals and closer cooperation with the normal planning system.

#### THE EMERGING TECHNOLOGY (ET) INITIATIVE<sup>6</sup>

#### Background

Historically, the West has relied on the higher quality of its weapons and equipment to offset the Pact's greater numbers of weapons. But in recent years, the quality of the Pact's weapons has improved and the West faces the specter of large numbers of sophisticated Soviet weapons. Recently, more thought has been given to how to use the West's technological advantage to produce higher-quality conventional weapon systems. The ET initiative is a conscious attempt to apply this advantage to the force modernization process and was proposed at the May 1982 NATO summit.

The ET initiative originated within the Pentagon with both ISP (International Security Policy) and DRE offices participating. The United States emphasized the role of the DPC's Executive Working Group in coordinating the ET initiative with both the military organizations of Alliance nations and the Conference of National Armaments Directors (CNAD) so as not to provoke a negative Alliance response by creating committees or organizations outside NATO. In fact, the CNAD has been the main actor on ET. The intent of the initiative was to solicit proposals for projects from all NATO countries and funnel them through the CNAD. These projects emphasized the 1990s time period and were to include advanced technology. Originally, it was hoped that a large number of small projects could be supported because participation by the smaller countries of NATO was considered to be important. The general areas for which proposals were solicited were improved sensor technology and improved munitions and submunitions. From a pool of proposals, the most promising would be selected for further study.

If at least four allies showed interest in pursuing some project they would agree to cooperatively undertake the necessary research, development, or procurement. In May 1984, the National Armaments Directors Representatives (NADREPs) submitted a list of 33 projects to a CNAD meeting and found support for 11 of these projects among at least four European allies. This list was later expanded to 16 agreed ET projects.

<sup>&</sup>lt;sup>6</sup>The ET initiative is described in a series of articles in the May 21, 1984, issue of Aviation Week. See also "NATO Selects Emerging Technologies," Aviation Week, April 16, 1984, pp. 28, 29; and Standardization of Equipment within NATO, A Report to the United States Congress by Caspar W. Weinberger, January 1984.

#### Lessons

The ET initiative has been floundering, and recently a renewed effort has been undertaken to revive it. One problem was that it failed to convey its intent clearly to our allies in Europe. Although the areas of concentration were defined, confusion arose because ET was being initiated at the same time as Follow-On-Forces Attack (FOFA), Counter-Air 90, and AirLand Battle. Many believed that this initiative was meant either to support one of the new doctrines or to be another U.S. effort to sell more weapons in Europe.

The NATO agenda was overloaded at the time of the introduction of ET. Debates were occurring over the doctrines named above, and the INF deployment battle was not over. Under these circumstances, European nations did not give the initiative the attention that it deserved. European countries have many fewer resources than the United States and cannot simultaneously consider several major items, especially when each item raises serious political concerns.

Moreover, to generate European enthusiasm for new weapons development, concrete benefits must be part of the package. With the ET initiative, Europeans received conflicting signals. At the time of the initiative, the United States was restricting technology transfer while trying to persuade the allies to participate in the development of high-technology weapons systems.

The chances of success of any such broad initiative will be improved if it is launched at a very high level in the U.S. government (by the President or Secretary of Defense) and followed through at a high level (at least Assistant Secretary of Defense [ASD]). Although the President introduced the ET initiative, it was initially sponsored at the ASD level and then pushed by the Working Group Level. This lack of high-level support lessened its perceived importance within the Alliance.

Finally, the initiative did not direct enough attention to the problems associated with armaments cooperation. It is intrinsically difficult to get agreement among Western nations over R&D because their industries compete. Governments cannot ask their industries to limit research in a particular area or, worse yet, to provide their competitors with the results of their own research without promising something in return. Simply listing project areas and asking for collaboration is not likely to be useful because it provides no incentive for the industries to cooperate.

## CONVENTIONAL DEFENSE IMPROVEMENT INITIATIVE<sup>7</sup>

NATO is again examining how to improve the force planning process and thus its conventional capabilities. At the December 1984 NATO ministerials, the Defense Ministers decided to renew efforts to improve conventional defense. At that time they invited the Secretary General and the Defense Planning Committee in Permanent Session to develop proposals to be introduced at the May 1985 ministerial meeting. The DPC tasked the DRC and the Executive Working Group to determine NATO military and planning deficiencies. Proposals were incorporated into the 1985 Ministerial Guidance and approved by the ministers at the May 1985 ministerials. Five areas were identified for possible improvement:

- · Military deficiencies,
- · Long-term planning,
- Armaments cooperation and planning,
- Infrastructure planning,
- · Planning coordination.

## Military Deficiencies

The DRC identified several military deficiencies to the DPC. The DPC, in turn, recommended that all nations give more attention to these deficiencies and make a special effort to meet the relevant force goals for 1985–1990. In addition, nations should increase their munitions supplies. Furthermore, all NATO nations have been tasked to reexamine their national defense plans for the 1987–1992 time period to take explicit account of these deficiencies.

#### Long-Term Planning

The DPC recommended that the NATO long-term planning process be improved by identifying the long-term roles and missions of NATO forces and their necessary composition.

Until now the roles and missions of NATO forces have not been precisely defined. The MNCs define these roles and missions but have usually given only vague guidelines to individual nations. For the most part, the various nations have provided the main outlines of their own roles and missions guided by general national strategies and their particular service doctrines. Without a common doctrine, the NATO

<sup>&</sup>lt;sup>7</sup>See the DPC Communique in *NATO Review*, June 1985. For a discussion of the initiative see James Moray Stewart, "Conventional Defense Improvements: Where Is the Alliance Going?" *NATO Review*, April 1985, pp. 1-7.

commander's job is difficult, especially since national forces are not under NATO command in peacetime. This has led, in turn, to the acquisition of different kinds of forces by each nation according to the doctrines of their national services.

The CMF tries to make the planning process more rational by assigning priorities to the types of force acquisitions needed to support these particular roles and missions. If countries can agree on a more precise definition of the roles and missions of their own national forces, then their own long-term national planning processes, including the R&D process, will produce more coordinated and rational coalition forces.

In principle this approach is quite reasonable. However, a problem could arise in securing the agreement of all nations to one set of roles and missions.

## **Armaments Cooperation and Planning**

Because much of the equipment procured by individual nations is, or could be, identical or very similar, considerable duplication occurs and substantial resources are wasted. Because of this obvious problem, the second planning area in which the CDI initiative is directing efforts is armaments cooperation and planning.

#### Infrastructure Planning

The Infrastructure Program has been substantially expanded by the major increase in funding in 1984. Inadequate infrastructure funding has seriously delayed the completion of past programs. It is to be hoped that this new emphasis on improving infrastructure planning will expand this program and will better direct NATO infrastructure funds where they are most needed.

#### **Planning Coordination**

The lack of coordination between planning areas creates a need to coordinate medium-term force requirements, long-term force requirements, strategies and doctrines, weapons development, and the acquisition and infrastructure programs. The DPC has recommended that this coordination could be improved through emphasizing coordination among the NATO committees responsible for each of these planning areas. Each committee would make an effort to work with the other committees, and the Executive Working Group would continue to act as a steering group and attempt to draw the efforts of these groups together.

## Lessons

The CDI is too new to have produced any lessons; it is still in the implementation stage. However, in light of the lessons learned from previous major initiatives, we can draw some general conclusions about how any new initiative can be most effectively implemented. Moreover, we can provide recommendations for this new CDI initiative to help it avoid some of the problems of past initiatives. But first let us consider some more specialized intitiatives.

## IV. SPECIALIZED PROGRAMS

In addition to the preceding major multifacted efforts to improve NATO conventional defenses, there have been a number of more specialized initiatives that have focused on narrow issues or particular needs within the Alliance. We have examined several of these initiatives that have by-passed some aspect of the formal Force Planning system in an attempt to improve the output of the system. First we considered the AWACS program, the NATO Infrastructure program and the COB program. These were considered because of their NATO-wide character and their focus on improving the output of the planning system. Then we examined the Roland/Patriot arrangement and the Host Nation Support (HNS) program. Although these are bilateral agreements and not NATO-wide agreements, they were chosen because they illustrate how such agreements can be used to improve the overall output of the planning system. We have excluded from consideration programs focusing more directly on acquisitions such as the Multiple Launch Rocket System (MLRS), or the F-16 coproduction programs.

## THE AWACS PROGRAM<sup>1</sup>

#### Background

The NATO AWACS program began in the early 1970s, when the capability of the NATO Air Defense Ground Environment (NADGE) radar system to detect low-flying Soviet aircraft was deemed inadequate. At the time, the United States was developing two aircraft capable of the airborne early warning (AEW) mission—the Boeing E-3A and the Grumman E-2C. To remedy the deficiency in their radar system, NATO could have let the United States acquire these aircraft and contribute these national forces to NATO. Unfortunately, the requirements for an AEW aircraft to cover North America were different from those in Europe, and a U.S. national AEW force would have been inappropriate for Europe. There was also some doubt as to whether the United States would commit this force to Europe in a

<sup>&</sup>lt;sup>1</sup>For a description of the AWACS program, see Equitable Cost Sharing Questioned on NATO's Airborne Early Warning and Control Program, Report to the Congress by the Comptroller General of the United States, July 1, 1980; and "Can NATO Afford AWACS?" International Defense Review, May 1975, pp. 667-676.

crisis. Finally, it was not certain that the U.S. Congress was going to appropriate the necessary financing. For these reasons NATO wanted its AEW aircraft based in Europe and the United States was eager for allied participation in their financing.

The AWACS program took place largely because of the efforts of several Americans. Major General Richard Bowman (USAF) sold the idea of the AWACS to the European militaries and was a major force behind NATO procurement from the beginning. The E-3A was deemed most suitable especially because of its longer range and compatibility with USAF AWACS. At USAFE, General David Jones was also instrumental in the process. He established an AWACS task force and coordinated efforts with the NATO bureaucracy. In 1975, a NATO AWACS program office was established and soon after a NATO statement of requirements for AWACS was drawn up. All of the normal NATO participants were involved in this project, including the MNCs and the Military Committee.

There was general agreement in the Alliance that the AWACS was needed, although problems arose immediately over program funding and cost sharing. Because of domestic pressures, the United Kingdom decided to withdraw from the program and offer their own Nimrod aircraft to the effort.<sup>2</sup> Finally, the sharing arrangements were settled without the United Kingdom with the United States paying more than half the cost of this program. The decision was made to go ahead with acquisition. Geilenkirchen, West Germany—the main operational base—opened in 1980 and the purchase of 18 AWACS aircraft was scheduled to be completed by the end of 1985.

If the normal common funding process had not been circumvented, the Alliance would never have acquired AWACS. But unique features of this program made acquisition possible. First, the objectives of the program were very clear because of the obvious threat of low-flying, penetrating Soviet aircraft. All nations could agree on the need for a capability to counter this threat, and all nations could agree that the AWACS aircraft would be suitable.

Off-the-shelf equipment was available to meet the threat in the form of the U.S. E-3A. If a system had had to be designed from the research phase, procurement would have been substantially more complicated. The R&D would have had to have been parceled out among the countries; and other issues beyond cost shares would have arisen, such as competing national industrial development needs and labor force employment.

<sup>&</sup>lt;sup>2</sup>Discussion of the Nimrod can be found in "Nimrods Pose Questions for NATO AEW Commanders," *Jane's Defense Weekly*, March 24, 1984, pp. 439-455.

Another unique factor in the AWACS program was that a warning aircraft could not be construed as an increase in offensive capabilities. Europe was sensitive to what it perceived as a more aggressive U.S. attitude toward the Soviet Union. The general sentiment in Europe was to preserve the benefits of detente. Force improvements would be more strongly supported if they were seen as not increasing NATO's offensive capability. The AWACS was clearly defensive and so did not produce political opposition in Europe.

The requirement of collective acquisition helped gain support for the program. The system's effectiveness depended upon close integration NATO-wide. Nations could not simply buy individual aircraft. Moreover, AWACS was seen as ideally suited for NATO collective purchase because clear benefits resulted for all allies.

#### Lessons

The AWACS program illustrates the possibilities for a common funding program for force acquisition within NATO. But it is almost unique. If common funding is to be used for procurement of weapons systems or equipment, individual nations can oppose the use of common funds for particular programs for a variety of reasons. Nevertheless, some circumstances could warrant such an approach. Using AWACS as a guide, we can postulate that common funding could be useful if: (1) The objectives of a program were very clear and the proposed program would counter an agreed threat, (2) nations could not counter this threat alone but would have to cooperate, and (3) off-the-shelf equipment was available. Cooperative R&D and acquisition would make common funding difficult.

The implementation machinery for the AWACS program was unique. Since no mechanism existed within NATO to handle it, a separate office was created and new committees were formed. Moreover, NATO's only existing multinational command was created to operate the 18 AWACS aircraft. They are owned and operated collectively by NATO itself. This is an example of what can be accomplished through focusing efforts on one program in the appropriate circumstances. However, it is difficult to generalize from such a program because it had so many unique aspects.

## COMMON NATO INFRASTRUCTURE AND THE COB PROGRAM

## Background

Common funding programs are characterized by contributions from Alliance members to a general Alliance fund according to some sharing formula.<sup>3</sup> The proceeds from that common fund are then used for projects that contribute to the common good. The NATO Common Infrastructure program is a good example. Nations periodically agree on its size and also approve spending on projects. The intent of these infrastructure projects is to fund military facilities essential to the operations of NATO forces that two or more countries having a high degree of common interest can use. Of course, most facilities that support the NATO defense effort are funded nationally.

Eligible project categories include: airfields (essential operational facilities and shelters for tactical aircraft); communications (military communications, connections with governments, satellite communications); POL (pipelines and storage); naval bases (POL, ammo, repair facilities, piers); warning installations; training facilities (ranges); war Hqs; surface-to-air missile (SAM) sites; forward storage sites; cruise missile sites; NADGE; and reinforcement support. Other projects can be considered if agreed upon.

Not all eligible projects are funded by the NATO Infrastructure program. The selection process originates with the Major Subordinate Commanders (MSCs) of NATO who receive proposals from various nations that want NATO to fund projects in their own countries. The MSCs review these projects and make recommendations to the MNCs, who then review the projects and, in consultation with the countries, the International Staff (IS), and the MC, make recommendations to the DPC. After approval by the DPC, the host countries and the user countries are responsible for constructing the particular facilities. (Host countries must provide the needed real estate and utilities free of cost.)

Although the Common NATO Infrastructure program involves only about \$1 billion a year, the construction of common support facilities is essential for the success of any military effort in Europe. The benefits from NATO Infrastructure funding are enormous. Over the past years, billions of dollars of such funding have financed the construction of numerous airfields and aircraft shelters, substantially improved NATO

<sup>&</sup>lt;sup>3</sup>For a discussion of issues concerning the NATO Infrastructure program, see George F. Francis, NATO Infrastructure: Is There a Better Way? Air War College, Air University, Maxwell AFB, Alabama, April 1976.

communications through laying cables and creating a NATO satellite communications system, installed thousands of miles of fuel pipeline, and prepared the Nike and Hawk sites. These facilities have been vital to NATO's force capability.

A more complex infrastructure funded program is the COB program.<sup>4</sup> As Soviet air capabilities for offensive operations against NATO grew in the 1970s, the United States saw a need for greater dispersal of air reinforcements from the United States. Since building new bases for them would be inordinately expensive, USAFE hit upon the idea of placing U.S. reinforcing squadrons on underutilized allied airbases. In addition, the U.S. airbases in central Europe were located almost exclusively in the southern portion of the Central Region, making it difficult to support other areas. Since most allied airbases would need modest improvements to shelter and handle U.S. aircraft as well, the COB program was conceived to alleviate these problems.

The intent of the COB program is to facilitate reinforcement of the U.S. tactical combat aircraft in Europe by U.S. aircraft coming from the Continental United States in crisis or war. The capacity of the U.S. MOBs in Europe is insufficient to handle these augmentation aircraft, but the additional aircraft could use existing facilities at upgraded European NATO airbases. In addition, deploying these augmentation aircraft throughout Europe would increase NATO airpower across the theater.

In 1967, the U.S. Secretary of Defense authorized the Department of Defense to negotiate with several European countries for COBs. By 1972, active negotiations were under way with several host countries, and Memoranda of Understanding were signed. By 1977, the USAF established support requirements for these airfields. These support requirements were airfield survivability measures (including an increased number of aircraft shelters) and Essential Operating Facilities (EOFs) such as runways, hangars, air traffic control, communications, and personnel facilities. The United States hoped that all these shelters and facilities would be provided from NATO infrastructure funding. However, by 1978 it was apparent that sufficient infrastructure funding would not be available. At this time, the support requirements were reduced to Minimum Essential Facilities (MEFs), which included parking space for the aircraft, storage space, and facilities to house a seven day supply of munitions and POL.

<sup>&</sup>lt;sup>4</sup>The COB program is described in Collocated Operating Bases: Is There An Alternative to Leasing? Defense Technical Information Center, Cameron Station, Virginia, March 24, 1982. For the importance of the program, see General Charles A. Gabriel, "Tactical Air Reinforcement for Europe," NATO's Sixteen Nations, February 1984, pp. 91-93.

The COB program potentially could provide very large benefits to all members of the Alliance for a fairly low cost. The U.S. augmentation forces will triple the air capability of USAFE if they can be survivably bedded down. The cost of the additional facilities required to service and protect about \$30 to \$40 billion worth of these augmentation forces is very small—perhaps \$300 million for MEF and \$1 billion to provide shelters and EOF. As of October 1984, fewer than 20 percent of the augmentation forces could be supported with MEF at COBs. However, the December 1984 Defense Ministers decision on a new six-year Infrastructure budget of \$7.85 billion will fund most of the requirements.<sup>5</sup>

#### Lessons

As the COB example illustrates, regardless of how favorable the payoff may be, operating through the Infrastructure program may not accomplish NATO's goals in a timely manner. The program has always been underfunded, with about \$400 to \$500 million available each year to fund many worthwhile projects. The recent increase in the NATO Infrastructure budget approved by the NATO Defense Ministers will nearly triple the previous budget. However, even with this increased budget, some problems will remain.

NATO Infrastructure funding is always a slow process because of the lengthy approval process within NATO and the negotiations needed among the countries involved. Even projects with a high priority, such as the COB program, have been delayed for years. Furthermore, some European countries have resisted much increase in the Infrastructure budget. The more money earmarked for Infrastructure funding in national defense budgets, the less money available at the discretion of the individual country. In the United States, funds for the Infrastructure budget amount only to about 0.1 percent of the defense budget even though the United States pays the largest single share. But in Norway, for example, Infrastructure funding is about 2 percent, and in the FRG it accounts for about 1-1/2 percent of their defense budgets. These countries lose control over a considerable portion of their defense budgets. However, despite all these difficulties and delays, the Common Infrastructure budget has been a great boon to NATO over time and is a particularly useful form of burdensharing for the United States whose forces get most of the benefit.

The COB program also illustrates the importance of an enthusiastic sponsor of an initiative. Although implementation of the program was hampered primarily by the lack of NATO Infrastructure funds, this

<sup>&</sup>lt;sup>5</sup>Aviation Week and Space Technology, December 10, 1984, p. 22.

initiative also suffered because no person or office within the U.S. Air Force championed its cause.

# BILATERAL/MULTILATERAL PLANNING AND ACQUISITION

## Background

More business is being done today in the Alliance on a bilateral or multilateral basis than in previous years. Some of this business involves cooperative procurement or coproduction efforts between and among various countries. However, in addition to major procurement or coproduction efforts, other bilateral/multilateral agreements have proved useful for improving Alliance capabilities and increasing the efficiency of the allied effort. The Roland/Patriot agreement between the United States and West Germany illustrates the possible utility of some bilateral/multilateral agreements for implementing the decisions reached through the planning process.

By the 1970s, the nuclear armed Nike Hercules air defense system had become obsolete. It was originally intended to defend against high-altitude penetration aircraft and was equipped with a nuclear warhead to compensate for its lack of accuracy. The system would be effective against a very dense, closely spaced attacking force, but changes in Pact air tactics made that type of attack unlikely. Not only was the system deficient, but the Alliance had been anxious to reduce its dependence on nuclear weapons. Since the neutron bomb incident and the unpopular INF decision, the Europeans were uncomfortable with nuclear weapons and reducing Alliance dependence on nuclear weapons was welcomed. By the mid 1970s, the Alliance, through the mechanism of the force goals, had agreed to modernize its SAM air defense system and to replace the Nike Hercules with the Patriot.

However, although improvements in air defense were placed in the force goals and countries agreed to these requirements, the FRG, Belgium, and the Netherlands could not meet these requirements because of the cost involved. To help these countries meet their obligations, the United States offered to help them acquire air defense systems.

Following the outlines of an agreement reached earlier between the United States and the United Kingdom by which the British agreed to man Rapier SAMs if the United States bought them, the Pentagon negotiated an agreement with the West Germans to facilitate the acquisition of air defense forces. ISP within the Pentagon was responsible for negotiating the broad outlines of an agreement. Then DRE

took over the negotiations to work out the details. The final agreement called for the United States to give the FRG 14 Patriot fire units and sell them 14 more. Twelve of each will be manned and deployed by the Germans. The other two will be used for training, maintenance, and logistical support. In addition, the FRG will man 12 U.S. Army Patriot fire units and will purchase, man, and support 95 Roland units, 27 of which will defend U.S. MOBs in the FRG. The remaining 68 Roland units will defend FRG bases, six of which are COBs. 6

This agreement benefits the Alliance as a whole because it enables the Germans to meet their obligations for air defense as specified in NATO force goals. The basis for the agreement was a trade between the United States and the Germans. The United States provided the Patriot missiles, which is cost-effective for the United States because they are already in production. But because of manpower ceilings in Europe and because of the pay required by the U.S. volunteer army, manpower is expensive for the United States. German manpower is fairly cheap because the Germans have a conscript army. However, the cost to the Germans of purchasing the Patriot from the United States would have been prohibitive if normal elements of cost were included. such as compensation for U.S. R&D. Thus, an exchange of U.S. hardware for German manpower was beneficial to both parties. The arrangement eased U.S. manpower shortages in Europe, and U.S. airbases will be better defended from air attack. The replacement of nuclear air defense systems with nonnuclear systems will raise the nuclear threshold. The Germans have benefited from the arrangement because they are able to meet their NATO commitment at reduced cost. Similar arrangements are being negotiated with the Netherlands and Belgium.

Another example of a useful and productive bilateral/multilateral agreement is the HNS initiative. The effectiveness of U.S. forward-deployed and early-reinforcement combat units would be enhanced if these arriving forces had increased logistical support and security waiting for them. To obtain this support and security, discussions with Germany began soon after the Carter Administration came into office. However, not until 1980 did formal negotiations begin. In 1982, the United States and Germany signed a wartime HNS agreement.<sup>7</sup>

Under this agreement, Germany will provide about 93,000 reservists in support of U.S. forward-deployed and reinforcing troops in Germany

<sup>&</sup>lt;sup>6</sup>The U.S.-FRG agreement is described in many places. The offical news release came on July 12, 1984, and was entitled "U.S.-German Patriot/Roland Agreement," *News Release*, Office of the Assistant Secretary of Defense (Public Affairs).

<sup>&</sup>lt;sup>7</sup>See Report on Allied Contributions to the Common Defense, A Report to the United States Congress, March 1983.

during a crisis or war. This military support will include security for U.S. Army facilities and Air Force elements at COBs, airfield damage repair, and transportation and resupply services. The civilian support will include transportation of U.S. personnel, POL and munitions, maintenance and repair service, and the use of German civilian equipment by the United States.

The basis of this agreement is similar to the Roland/Patriot agreement. Germany will bear the personnel expenses for their military and civilian support. The United States will pay for many of the materiel investments and other operating costs. In addition, the United States will pay for all goods and services requested and received by its forces during crisis or war.

The costs will be shared equitably between the two countries by an agreed formula with Germany paying a little more than half the costs. The countries will attempt to minimize the costs of the program by using existing facilities as much as possible. If there is a shortfall in available facilities, both countries will attempt to obtain the needed facilities through the NATO Infrastructure program.

This agreement has provided the model for other agreements between the United States and several European countries. These agreements benefit the Alliance as a whole because they would serve to enhance the effectiveness of U.S. combat units in time of crisis or war. This enhancement is accomplished efficiently because in many instances the facilities are already available and the manpower is in place. These agreements serve to organize these resources more efficiently and to provide the key element for using these resources. Not only is the military effectiveness of the Alliance enhanced in time of crisis or war, but these agreements will reduce the demands for U.S. manpower during peacetime as well.

## Lessons

The Roland/Patriot example illustrates a problem with force planning within NATO. The force goals process sets requirements but does not provide a mechanism for meeting these requirements. Individual nations must assume the responsibility for fulfilling the requirements. Presumably, they also have the capability of fulfilling them. Yet, where achieving their force goals requires spending beyond what their parliaments are willing to, the problem can sometimes be resolved by bilateral or multilateral arrangements with other countries. This type

<sup>&</sup>lt;sup>8</sup>General Richard L. Lawson describes the utility of HNS in "Wartime Host Nation Suport," NATO's Sixteen Nations, April 1983, pp. 16-18.

of arrangement is more readily negotiated directly between the countries concerned, which must arrange all the necessary details.

The HNS agreements are similar to the COB program in that both promise to provide a large payoff in enhanced combat effectiveness for a relatively small investment in improving the facilities and support of the committed combat units. However, the HNS and COB agreements are carried out differently. The COB negotiations were conducted bilaterally with a separate memorandum of understanding signed by the United States and each individual country. However, financing for these agreements was arranged through the NATO organization—the Common Infrastructure program. Here the program met with considerable delays and implementation has been very slow. The HNS agreements could have been negotiated through the NATO organization. However, this would have been a very complicated and complex procedure. Instead it seemed more efficient to reach a series of bilateral agreements so that attention could be given in turn to the unique aspects of each situation. Financing has been arranged between the two countries involved and has not gone through NATO. For this reason implementation is proceeding more rapidly.

## V. CONCLUSIONS AND RECOMMENDATIONS

#### MAJOR OFF-LINE INITIATIVES

The major initiatives considered in this report differed from one another in many ways. But all were motivated by a perception that the regular NATO Force Planning system generated insufficient leverage to make countries respond. Because these initiatives chose alternative ways around the normal planning process, all were opposed from many quarters. If an initiative is successful and produces substantial results, some opposition and disruption are acceptable; however, care should be taken to select the content, implementation mechanism, and timing that most improve conventional forces and least damage the political cohesion of the Alliance. Otherwise, it is likely to achieve only limited success at best.

To help ensure a successful outcome to new major initiatives, several criteria should be applied: 1

- The timing of the initiative must be right. For example, the LTDP was launched after a period of U.S. focus on Southeast Asia. This renewed focus of U.S. attention on Europe was welcomed at the time. In contrast, the ET initiative came in the midst of an array of U.S. initiatives directed toward Europe such as Counter-Air 90, AirLand Battle, and FOFA. None of these initiatives was particularly welcomed and ET complicated the picture.
- ◆ The initiative proposed must demonstrate clear military benefit to the Alliance. To do so, it should propose a coherent framework that fits into the overall roles and missions of the NATO forces concerned. Then specific projects should be placed within this framework to demonstrate their contribution to the overall objective. The involvement of the NATO military, especially SACEUR, is essential to this effort.
- The time frame for any initiative should be carefully selected. Short-term proposals that entail sizable additions to defense budgets are likely to generate considerable political opposition because these budgets contain little flexibility. Furthermore, it takes time to overcome the inertia within the Alliance. Indeed, it takes at least a year and usually more for any initiative to be staffed by NATO and approved by the relevant allies. On the other hand, although long-term planning has many advantages,

a long-term initiative is difficult to sustain in NATO. Governments change frequently and energy is dissipated after a few years.

- Projects must consider costs. Although European countries do have some flexibility in their budgets over a short-to-medium time period, European national budgets are small and large demands cannot be made. If some source of funding can be identified, such as the 3 percent increase in defense budgets, the initiative is more likely to be successful.
- Consideration should be given to the political benefits of the initiative. Focusing U.S. efforts on Europe can promote cohesion within the Alliance but not if it occurs too frequently. Consideration needs to be given to the timing of the initiative and the feeling in Europe at the time. If undertaken, the initiative should be given high visibility to promote solidarity within the Alliance and to provide an incentive to all nations.
- The economic benefits of the initiative need to be considered. Will European economies and national industries benefit from this initiative? If a two-way street in arms cooperation is involved, there is a greater chance of support in Europe. If an initiative is seen as another "buy American" scheme, it often will not be supported. The transfer of technology to Europe is also very important. Simple production under license to an American firm is not attractive to Europeans. Of much greater interest is the possibility of sharing in the R&D and production.
- The initiative must consider priorities. Major constraints exist
  that limit the discretion of the NATO nations to fund new programs. However, much can be accomplished if countries can be
  persuaded to acquire new systems in accordance with Alliancewide needs and not only according to their own narrow selfinterest.

If an initiative by the United States seems to be necessary, and an appropriate list of projects can be found, next comes implementation, which is as important as the recommendations. These steps are important.

• The U.S. position must be coherent and cohesive. In particular, ISP, DRE, JCS, the services, State, and SACEUR must support the initiative. This consent can best be achieved if an individual at the ASD level or higher within the Pentagon is responsible for its implementation.

- The allies must give their informal support. Influential members of the major NATO nations should be consulted and bargains struck.
- It is important to elicit formal support of the heads of state to increase the pressure to comply. Komer in the LTDP used this technique quite effectively.
- The Finance Ministers should be involved in the process. In many European countries, the Ministry of Finance is more influential than the Treasury Department in the United States and its support is necessary. Finance Ministers do not make defense policy decisions, but keeping them informed will help to produce their funding support.
- The NATO bureaucracy must be involved in the implementation.
   Constructing a completely parallel organization within NATO is wasteful in time and resources. The NATO bureaucracy must be used as much as possible. But it must be by-passed at the critical junctures.
- A follow-through procedure must be instituted. Possibly the single greatest flaw in the normal force goals process and in most initiatives is their lack of an effective follow-through. It is critical for the success of any initiative that it create a monitoring committee to assess progress. Furthermore, this committee must be given some authority from the members of the Alliance to ensure implementation of agreed measures.

## SPECIALIZED INITIATIVES

Specialized initiatives can take many different forms but all are undertaken because some projects cannot be pursued effectively through the normal NATO organization. A special effort is needed to direct attention and resources to a project to ensure its completion within a reasonable time. Some general conclusions can be drawn about the selection of projects and the implementation procedure to increase the effectiveness of the initiative.

- The programs selected must have a clear and precise military objective. Most members of the Alliance must agree that the threat is real and serious. The proposed program must clearly and unambiguously meet this threat. For example, by the mid-1970s, all NATO members agreed that a low-level Soviet air threat existed and AWACS could help to meet this threat.
- A cooperative effort by the Alliance must be essential to achieve the goal of the initiative. If individual countries can meet the

- threat through individual procurements, they will usually have an incentive to do so.
- A cooperative effort must produce mutual benefits for all participating members of the Alliance. If nations can be included in the various phases of the research, development, and production of a commonly funded project, then its support will be increased. For example, the United States provided off-the-shelf equipment in the form of the E-3A for the AWACS program, which allowed no R&D benefits to the allies. Future efforts would receive more ready support if they provided economic and technical benefits to Alliance members as well as military benefits.

If a specialized initiative can be found that meets these criteria, then adequate implementation machinery must be found.

- Some projects can be carried out through the normal NATO Infrastructure program. This program has been in operation for many years and operates very well within the context of its goals. For example, the COB program is being carried out within the Infrastructure program. The problems that it experienced were due more to the general lack of funding for infrastructure and the COB program's lack of perceived priority than to the implementation mechanism.
- For other specialized initiatives different machinery must be used. If this program is to be commonly funded, then a program office should be created that is separate from existing NATO offices but operates through NATO such as the AWACS program office. If a program is not to be commonly funded, then the countries involved can make the necessary bilateral/multilateral arrangements.
- It is important that the initiative have the support of the major military commands involved. For example, the U.S. Air Force supported the AWACS program and was instrumental in its implementation. A major problem with the COB program has been its lack of an enthusiastic military sponsor.

Specialized initiatives can also cause several problems.

 Programs may be slow. Consensus is necessary at all stages of the project. The slow pace of the AWACS and the COB programs testifies to the time required for committee decisions. Moreover, neither of these programs involved R&D. A program that attempted to use common funding through its entire course of research, development, and production would probably be even slower.

- A specialized initiative involving common funding is frequently not popular with Europeans because they feel that they are being asked to shoulder an unfair burden. Both the agreed shares of the NATO Infrastructure program and the shares of the AWACS program take a larger proportion of the defense budgets of the European nations than the U.S. shares take from the American budget. Thus, any increase in this common funding will reduce European countries' discretionary spending power, and they will tend to resist such increases. However, an opposing incentive can be created if the United States is willing to assume a larger share of the common cost, as happened in the AWACS case.
- A common funding approach gives a very high priority to the common program. Nations will transfer funds out of other programs in their budgets to fund this program, but they are unlikely to increase the size of their budgets. If a particular program does not justify such a high priority, then perhaps other ways should be found to implement it.

## VI. MAKING THE CDI WORK

These general guidelines, based on lessons from past efforts, should be considered before launching any initiative. However, the lessons flowing from this study can also be applied to the current CDI initiative. Let us consider each of the specific areas addressed by the CDI for improvement and offer recommendations based on past efforts.

#### MILITARY DEFICIENCIES

The attempt to improve NATO conventional forces in critically deficient areas by working through the force goals process and asking nations to devote more effort in these areas is quite similar to the efforts of AD-70, where eight areas of deficiencies were noted and NATO members were urged to make greater efforts. Then, as now, an amendment by a U.S. Senator was at least partly responsible for the renewed interest in conventional force improvement. Likewise, the current CDI initiative and the past AD-70 initiative have both been sponsored primarily by the Secretary General and are operating entirely within the NATO system. Also, several major problems identified by both initiatives are the lack of aircraft shelters, inadequate mobilization forces, and inadequate war reserve stocks. Thus, although it is certainly too early to reach any conclusions or to make any judgments about the current CDI initiative, we can analyze past NATO experience with AD-70 to offer suggestions for improving the effectiveness of implementing this effort.

Our critique of the AD-70 initiative suggested that it had four problems: (1) National and NATO planning systems were unaffected by the initiative and thus all of the shortcomings of the system remained intact; (2) the time frame for planning was not extended, preventing effective long-term planning; (3) AD-70 did not emphasize setting priorities within the eight areas of deficiencies; and (4) there was not enough follow-through to see that changes were carried through.

The new CDI initiative has expanded its focus beyond attempting to produce improvements in areas of critical military deficiencies. This new initiative also attempts to examine planning system shortcomings and to improve the planning process. In addition, the CMF proposes to extend the length of the planning process beyond the six years of the force goals process. Furthermore, the CDI is setting priorities within the deficiency areas. Thus, the CDI initiative explicitly

addresses the first three problems found with AD-70. However, this new initiative may suffer from the remaining problem that undermined AD-70.

This new initiative lacks a strong follow-through mechanism. When countries fail to meet their agreed force goals, they are subject to the opprobrium of their fellow ministers at DPC meetings. That is not enough. More could be done if a new committee were formed to monitor progress in the nine areas of agreed deficiencies and this committee publicly applied pressure on nations to meet the particular force goals. Bringing this kind of pressure to bear would require that high government officials from all NATO nations participate. The U.S. representative to the committee should be at the rank of ASD or higher to increase the visibility of the effort. This committee should be responsible for monitoring the Alliance effort in the critical areas and discussing shortcomings with the particular nations.

The European members of the Alliance would not welcome forming a committee with responsibility to monitor the allied efforts. Many remember the LTDP and are opposed to this kind of pressure. Nevertheless, without a more effective follow-through procedure, this new effort may accomplish some force goals in the short run—while the United States is watching—but will quickly dissipate when U.S. attention is diverted to other problems.

### LONG-TERM PLANNING

One frequent criticism of the NATO planning system—that the time period considered is too short—will not be met simply by extending the length of the NATO force planning cycle. Rather, the NATO system must be tailored to better meet the individual needs of Alliance members. The planning and procurement cycles of all countries are different. Equipment must be replaced at different intervals and new weapons are introduced on different timetables. To a great extent, they cannot be made to conform to a specified common timetable. The timing of procurement depends on circumstances within each country, often on changing political factors. The NATO force planning system does not take sufficient account of these differences between nations. Long-term planning might improve if NATO increased the flexibility of its own planning system rather than asking member nations to conform.

#### ARMAMENTS COOPERATION AND PLANNING

This very complex topic, involving R&D and production as well as force planning, is beyond the scope of this report. Here, we have limited ourselves to discussing the general planning process. However, since the CDI has emphasized support of armament cooperation and planning, we can make recommendations for how this initiative could be more effectively implemented.

The ET initiative, which attempts to promote armament cooperation and planning, has faced a major problem. The U.S. government cannot simultaneously restrict technology transfers and induce our European allies to enter into cooperative R&D arrangements. One of the major inducements to European firms for cooperative efforts is the possibility of expanding their technology base. Relegating Europe to the role of subcontractor of low-technology system components will limit the extent of cooperation in this initiative.

The industries of the most technologically advanced nations will resist technology sharing. All countries have established industries that compete with one another for a share of business. Although in principle it may be rational to pool resources and share R&D and production facilities, in practice this always proves to be difficult. Firms are reluctant to share their trade secrets, which they feel give them a competitive edge; and each tries to establish itself as the contractor, reducing the competitors from other countries to the role of subcontractors. The United States needs to develop a more coherent industrial policy, without which this approach is likely to have limited success.<sup>1</sup>

Short of a grand technology-sharing strategy, the United States should continue to pursue specialized programs. In particular, bilateral and multilateral programs would be a useful way to continue increased cooperation while the longer-term R&D strategy was being developed. Such bilateral/multilateral arrangements not only promote efficiency but in fact allow systems to be deployed that would not have been deployed in the absence of an agreement.

Unfortunately, this approach does not lend itself to systematic application. Bilateral/multilateral arrangements cannot form the sole basis of Alliance arms cooperation. By their very nature, they are based on two or more countries pursuing a mutual interest in cooperation.

<sup>&</sup>lt;sup>1</sup>The recent Nunn-Roth-Warner amendment is a useful first step. This bill would set aside \$200 million for cooperative development of high-technology projects among NATO nations and it established a mechanism for considering such projects at an early stage. Another \$50 million was made available to test European weapon systems side-by-side with American systems. For a description of this amendment, see David Abshire, "Arms Cooperation in NATO," Armed Forces Journal, December 1985, pp. 66-70.

Nevertheless, such agreements can be useful and are likely to become increasingly important in the Alliance.

## INFRASTRUCTURE PLANNING

The decision by the DPC to allocate \$3 billion to build 665 aircraft shelters by 1990 will certainly improve the COB program. The increase in funding for the Infrastructure program should likewise improve NATO infrastructure if it is wisely used. In addition, perhaps a common funding approach could be used more widely for the procurement of certain kinds of weapon systems. Such an approach was quite successful in the AWACS program and perhaps could be used again. However, some of the lessons learned from the AWACS program should be kept in mind if this approach is used. The program should have military objectives, which require collective acquisition. Even then, NATO AWACS would probably not have been acquired without the availability of off-the-shelf equipment from the United States in the form of the E-3A. It is doubtful that the Alliance could have agreed on the distribution of research, development, and production for a new aircraft, since they fought so hard over the distribution of payment shares for the U.S. E-3A. Furthermore, using common funding is a very slow procedure. Agreements must be approved by all: and when many nations are involved, progress can be so slow that expenses climb. Then the virtue of the common funding program could be undermined.

Procurements through common funding set an extraordinarily high priority on the commonly funded system. In effect, nations will shift resources from other programs to meet the new requirements of a commonly funded program. European countries resist common funding because the agreed upon formula usually involves a larger percentage of their national defense budgets than the United States pays, even though the U.S. share is larger in absolute terms.

Thus, commonly funded programs have limited application for procuring weapons systems. There are too many constraints to make this approach useful for general application. However, for certain specialized applications they may be very effective.

#### PLANNING COORDINATION

As the past record indicates, any effort to improve coordination within NATO is likely to have limited success. In 1982, an attempt was made to coordinate force planning, infrastructure planning, force acquisition, and nuclear planning. These areas were to be coordinated through the formation of a new committee, which would include the Assistant Secretary General (ASG) for Defense Planning and Policy, the ASG for Infrastructure, and representatives of the CNAD and the Nuclear Planning Group.

A committee was formed but it consisted only of the representatives of the Assistant Secretary Generals for Defense Planning and Policy and Infrastructure. It proved to be impossible to include CNAD in the effort because the French are important members of CNAD but are not represented in Defense Policy and Infrastructure. The NPG was not included in the coordination effort because not all NATO nations were represented on the NPG.

This attempt illustrates two problems with improving the coordination of planning within NATO. First, as long as the French are an important part of the Alliance defense but remain outside many NATO defense activities, the coordination of planning that includes armaments cooperation will be difficult. The best that can be hoped for is to improve armaments cooperation through CNAD or bilateral/multilateral arrangements.

The second problem concerns nuclear issues. There are disagreements among the 13 countries represented on the NPG concerned with the circumstances surrounding the first use and follow-on use of nuclear weapons in Europe. These are not likely to be resolved soon.

